



Vol. 52

February 2002

No. 2

## Meeting Location Changes for February!

Due to the Lent season, the Mt Calvary Lutheran Church will be reclaiming its downstairs meeting room for February and March, and we're back to looking for another location for these two months. Thanks to our new vice president Kate Ellis KØEGJ, we have a location!

The Leon Young Service Center. 1521 Hancock Expressway. We will meet in the Pikes Peak Room on the second floor. It is handicapped accessible.

### Directions:

1. Take I-25 to Martin Luther King Bypass (MLK Bypass); proceed east on MLK Bypass to Union; proceed South on Union Boulevard to the first right turn which is Hancock Expressway; turn right and within 1 to 1 ½ blocks you will see the Leon Young Service Center on the right side. Turn into the North driveway (the one without the stop light) and park; enter into the NORTH Entrance of the Building.

or

2. Take Hancock south cross Fountain Boulevard and proceed approximately 1 ½ miles south and you will see the Leon Young Service Center to the Left. If you reach a stop sign that is Union you have gone too far, turn around and come back a block. Turn into the North driveway (the one without the stop light) and park; enter into the NORTH Entrance of the building.



February Program is by Mark Baker, KGØPA, ARRL Section Government Liaison

**Meetings** Our monthly meetings are normally held on the 2nd Wednesday of each month at 7 pm at Mount Calvary Lutheran Church, 1318 N. Circle Drive, about 1/2 way between Platte Ave and Constitution Ave on N. Circle. Our Annual meeting is in October. Check the web site for any changes.

### Regular License Exam Sessions

Our ARRL VEC test sessions are on the 2nd Saturday of even numbered months at 0900 at the Denver Technical College, 3245 International Cr, across from Memorial Park. Contact Erik KGØXE for details. Examinees need to bring (1) \$10, preferably a check or money order payable to ARRL/VE; (2) picture ID; (3) the signed original and a copy of your current amateur radio license and CSEs you have (we keep the copies); and (4) a pen, pencil, and calculator if needed. Memory calculators will be checked.

**PPRAA Web Page** See it at <http://www.qsl.net/ppraa/>. Thanks to Rick Brown KØSU, our webmaster and reflector maintainer.

**Get on the PPRAA E-mail Reflector** Stay on top of new or short-fused developments. Send e-mail to [majordomo@qth.net](mailto:majordomo@qth.net); within the body type "subscribe ppraanet".

**PPRAA Simplex Net** All amateurs are invited to join us on Thursday evenings at 1900 on 146.58 MHz simplex for our club net. Get the latest club and regional happenings!

## Officers and Directors

President	Rick Brown	KØSU	531-9423	k0su@arrrl.net
Vice-President	Kate Ellis	KCØEGJ		
*Secretary	Mike Allen	NØMIK	594-4896	n0mik@arrrl.net
*Treasurer	Ron Deutsch	NKØP	593-8352	nk0p@arrrl.net
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*Board Member	Jerry VerDuft	ADØA		verduftj@earthlink.net
*Board Member	Tom McDaniel	NØNTX	570-1465	n0ntx@amsat.org
Board Member	Aaron Pelouze	KD6FLM		
Past President	Sid White	K4ARM		
Ø-Beat Editor	Rob Roller	N7LV	282-0204	n7lv@amsat.org

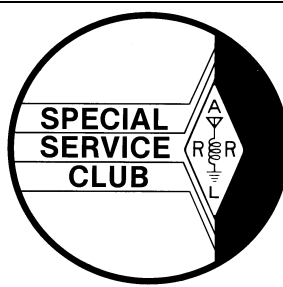
\* Indicates this Director is completing the second year of a two-year term

## Committee Chairs & Other Contacts

Activity	Sean Mullally	NØCT		
Auditing	Kate Ellis	KCØEGJ		
Asset	Mike Stansberry	KØTER		
Historian	Roger Eslick	NØVR		
Interference	Bill Petty	NØNJX	532-1439	
Membership	Les Borst	KCØNC	634-3995	
Programs	Rick Brown	KØSU	531-9423	k0su@arrrl.net
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Public Service	Mike Stansberry	KØTER		
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ARES EC	Wes Wilson	KØHBZ		
ARES Liaison	Mike Stansberry	KØTER		
ARRL Section Mgr	Jeff Ryan	NØWPA	260-6826	n0wpa@arrrl.net
CCARC Liaison	Moe Pierce	WBØRTF		
RACES Officer	Tony Dal Lago	KC4VMB	532-9046	kc4vmb@uswestmail.net

## Upcoming Club Programs

Feb .....	CO Section Government Liaison Mark Baker KGØPA, speaker
Mar .....	PSK-31 or NWS weather, not sure yet which one



**Articles for the Ø-Beat** Deadline for articles or ads for the March issue is Feb 25. Submit articles by e-mail, US Mail, telephone or in person to the editor. Editor reserves right to correct for readability, grammar, spelling, punctuation and length.

**Nonprofit Organization** The PPRAA is a federal 501(c)(3) nonprofit organization and welcomes all contributions. Your contributions/donations may be tax-deductible.

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## Club and Local News

### *President's Corner* *de KØSU Rick Brown*

Boy, it is hard to believe we are into the second month of the year already. Club activity seems to be on the rise. We have already started talking about the ARRL Field Day in June, planning is well under way for the PPRAA Megafest 2002 on June 1<sup>st</sup>, and there is club representation for the ARRL convention planning for 2003. Our normal activity continues with programs at the club meetings. I think we have some very interesting programs coming up. I hope that you can get out and see some of your fellow members as well as support the presentations. The PPRAA Simplex Net continues to meet on 146.58 MHz on Thursday evenings at 1900 local time. Ryan KCØGLQ continues to do a fine job running this net and I urge you to join us. A great opportunity to meet a few club members on the air and to make sure that antenna is still doing its job around town.

In last month's *Ø-Beat* Rob urged everyone to think of what they could do to help the club. I agree with that very much. In fact, I would like to find someone to take over the PPRAA Website and the E-Mail Reflector. Another job that desperately needs filling is the Publicity Chairman. If we can get volunteers for these and other jobs it will help to make the club even better than it is.

I would like to apologize for the confusion over the club meeting place for the next two months. The Board made one decision to move the night and location and then changed when we realized the problem it would cause for the programs that were scheduled. I hope that you can all make it to these meetings, as they certainly sound interesting. Thanks to Kate, KCØEGJ we have a location that can hold us and has plenty of parking to go with it.

I look forward to seeing you at the next meeting.

73 de Rick

### *PPRAA Will Continue To Stay Involved in* *Division Convention Planning* *de ADØA Jerry VerDuft*

*[The following material was excerpted from Jerry's notes at the kick-off planning for the Rocky Mountain Division Convention.]*

The kick-off meeting was held on Jan 12 in Denver to begin planning to plan a division convention in Colorado.

Led by Section Manager Jeff Ryan NØWPA and Jerry VerDuft ADØA, the meeting centered around the feasibility of Colorado clubs hosting such an event, and whether or not there'd be enough support from the affiliated clubs in CO.

About a dozen and a half representatives from about 8 or 9 clubs met, including Rick Brown KØSU, Joanie VerDuft KCØGMI and W8EGF John Herring representing the PPRAA.

It's hoped that the convention could draw in about 1,200 hams (out of the 28,000 in the division of which 12,000 are ARRL members) to a convention targeted for around June 2003. The location is still undetermined as the committee looks at more remote locations around the state, including Vail, Aspen, Fort Collins, Estes Park, Pueblo, partly to help push up occupancy levels, which could help reduce costs. Larger cities, like Denver and Colo Springs, aren't necessarily out of the running, but a remote location is preferred.

Of course, with any large endeavor, there is the matter of money required before the event. The committee is hoping that the sponsoring clubs could come up with about \$150 each (maybe less for smaller clubs) for seed money. Location is very important, as is the quality of the planning. The entire committee is also determining whether to operate under the umbrella of the CCARC (which was formed years ago to do just this), or to form its own mini-corporation.

The general consensus of the PPRAA board is to give the committee our full support. This will involve more volunteers from the club to get involved, depending on how the PPRAA helps out. Knowing that we normally put on a swapfest in June, KØSU offered to hold the swapfest in conjunction with the convention. So if this gets going like it looks like it will, you can expect your club to volunteer heavily in the planning and operation of the convention.

Future planning meetings will be held on the 2<sup>nd</sup> Saturday of future months in Castle Rock.

Since quite a number of the planners are also PPRAA members, if you have any questions you can contact any of them: Jerry VerDuft ADØA, Jeff Ryan NØWPA, John Herring W8EGF (though not a member at this time), Wes Wilson KØHBZ (representing MARC at the committee meetings, but a PPRAA member nevertheless), Rick Brown KØSU and Moe Pierce WBØRTF, our CCARC representative.

**March Meeting Heads Up! Due to the well-known fact that the Mt Calvary Lutheran Church conducts services on Wednesday nights during Lent, we are planning to either move the March meeting to another location, or try to schedule the meeting for a different night if we can't find a place. We'll announce it on the PPRAA net, and in the March Ø-Beat when we know for sure.**



## Public Service & Emergency Communications

The PPRAA is an ARRL Special Services Club, but it is not an emergency services club itself. The PPRAA supports all amateur radio involvement in public service and emergency communications in any way it can, including reporting activities happening in the region. These columns are based on available knowledge of the editor, and the opinions expressed are not necessarily the opinions of RACES, ARES, Skywarn or any other organization, or their leadership. Logos used with permission.

### RACES



<http://www.qsl.net/epcraces/>

VHF Net Tuesdays at 1930 on 146.76 MHz  
CMRG repeater

Tony Dal Lago KC4VMB, RACES Officer

A good program at the January training session on GPS and map reading. Rick McMorran NØVLF, also a law enforcement officer, fire investigator, and several other things, gave an excellent presentation and demonstration of GPS, how it works, and some fundamental uses of it along with map reading. The rest of the year is also planned out now, thanks to Tony and a number of RACES members that met on 26 Jan. Programs will be on severe weather, basic operating practices, fire weather, damage assessment, EOC operations, HF mobile ops, winter survival, and several others. Check the web site for further details. All members will be asked to renew their commitment to RACES, or risk being dropped from the program. Training is a must – please show up, and also check in to the nets.

### ARES



<http://www.qsl.net/ppares/>

VHF Net Tuesdays at 1900 on 146.97 MHz  
PPFMA repeater

Wes Wilson KØHBZ, EC

Staff meeting coming up on Feb 10 at 1300. Staff members need to attend; other interested members can drop by as well. If you missed the last MARC meeting in Woodland Park you also missed the last opportunity to get your PPARES badge for a while. No other sessions are currently planned. Speaking of MARC, PPARES says good-bye temporarily to Jeff Smith KBØYCI as he heads for Gold Country (California) for a new job. He hopes to return after a short time, pending satisfactory employment. If you've not re-registered with PPARES in the past couple of years, please do so immediately. Members that have not provided current information, *INCLUDING AVAILABILITY INFORMATION*, stand the chance of not getting a phone call during a callup, even though still in the data base. Visit the web site, or contact the EC or resource mgr to get re-registered.



**QSL Card of the Month**  
(Submitted by Ron NKØP)

## Articles

### **Computer Performance Fundamentals** *de KIØPE Seth Bardash*

[Ed: Part I of a multipart article.]

What does faster, better, performance mean?

Performance can be measured many ways. As the saying goes: there are lies, damn lies and then there are benchmarks. Benchmarks can be useful and meaningful, if and only if we understand what they are measuring and how a computer system works.

In a workstation, performance means fast response to human requests. This can be defined as fast start times for a program once the user has clicked an icon or it can be shorter compile times when a user is trying to build a program or an operating system (like a linux kernel).

In a server, performance is measured by the time it takes the server to read or write some external data to or from its data storage medium or the time it takes to find a given piece of data in its internal data stores. Performance can also be measured on a server in transactions (usually different for each application) per second.

For special cases, like firewalls or routers, performance is measured by the maximum amount of network traffic it can move from one input/output port to another input/output port all the while filtering or rerouting the data stream.

To better understand the options that affect performance, we first need to understand what is happening inside a computer.

### **How a Computer System Works**

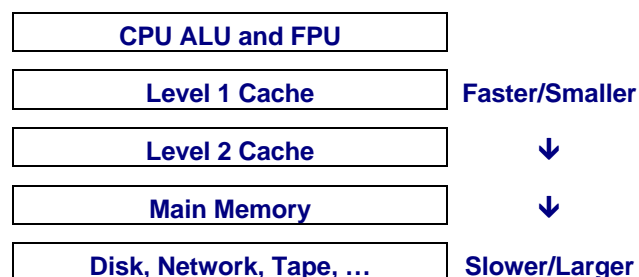
Most computer systems are based on the same principles and in a general sense on the same type of architecture. A processor or multiple processors execute a program. A program is just a sequence of instructions that tells a processor how to do what you want the machine to do.

At a given clock speed, internal processor architecture, internal cache size and architecture, processor to memory bandwidth (memory speed and type and North Bridge Architecture) and software optimization all affect system performance.

How fast a processor executes a program is controlled by many hardware and software decisions made when that particular computing system is designed. In today's machines, data locality is the key to system performance. What this means is: the closer the program and data is to the processor, the faster the processor can execute that program. The function of a processor's cache is to hold program elements or data "close" to the processor for faster access.

All processors being sold today have at least one level of memory cache inside. This memory cache in most cases will run at the same speed as the processor. The fastest speed cache is the level one cache. This may be organized as a unified cache (aka Intel) or as two caches, one for instructions and one for data (aka AMD). The level two cache is almost always unified and is usually labeled a having some number of "associated sets". A 2 way set associative cache can hold two sets of associated information. A 4 way set associative cache can hold four sets of associated information.

Below is a much simplified graphic that shows the relationship among the standard computing elements in a computer system.



If a given piece of information is not in the level 1 cache, the system is forced to look for it in the level 2 cache. If the information is not in the level 2 cache, the system is forced to look for it in main memory and so on. If the information needed is stored close to the central processing unit (CPU) Arithmetic Logic Unit / Floating Point Unit (ALU/FPU) block, the system has very fast access to the information. If it is not close to the CPU ALU/FPU block the system is forced to look for it further away in slower storage areas (further down in the graphic) and a significant time delay is incurred, thus decreasing overall performance.

The larger the storage capacity of the upper blocks in the above illustration, the faster most programs run. Today, most CPU's have all the cache built-in (older socket 7 CPU's had between 16K and 256 K bytes of internal level 1 cache; associated socket 7 motherboards usually had 512K bytes of external level 2 cache). Today's completely internal cache structure affords faster cache accesses. It also has a down side. As the CPU gets more complex and the caches get larger and faster, the CPU chip puts out more heat and therefore requires a more efficient Heat Sink Fan (HSF) assemblies.

## **Colorado Connection Newsletter** *de WBØQMR Paul Shackelford*

01/04/2002

Happy New Year to all. It was fun to see many of you at our annual Christmas Party. Fun was had by all. Thanks to Bill KBØNWM and Sharon KBØTPN for arranging the party. Winter is a time of rest for our great technical committee so there is not much new to report on new repeaters. We hope that all of the current repeaters stay up and running until June when we can access most sites. Plans for getting Durango up early this coming summer are well along the way. We hope that tests will be made by the Durango people this winter to determine if the link radio on Wolf Creek Pass is going to be able to link to a local repeater in Durango. If any of you live in southwest Colorado or northwest New Mexico, I would urge you to try to work The Connection on this Wolf Creek link. Then email us at [kb0vj@colcon.org](mailto:kb0vj@colcon.org) or contact us via radio on the Thursday night net at 8:00pm local time, and let us know how your test went. Your help will be appreciated greatly. (The link radio at Wolf Creek Pass is on 145.310-, requires a 123.0Hz tone. It does not repeat locally.) The next three or four months will be devoted heavily to planning new sites and improvements to others. Most of this planning goes on at the monthly Volunteers meetings that are held in Denver on the second Tuesday of every month from March to September plus November and January in the Winter. If you have any ideas on system expansion or maintenance or FUND RAISING please come to one of the meetings. Detailed directions are available by giving a call on The Connection on the afternoon of the meeting but generally it is near I-70 and Holly St. in Denver. Hope to see some of you at the next meeting.

73 The Colorado Connection

## **Rare Appearance by Pres. Bush on HF Bands**

*[From the ARRL Bulletin]*

NEWINGTON, CT, Jan 31, 2002--President George W. Bush spoke today via Amateur Radio to members of the Northern Florida Section Amateur Radio Emergency Service Net. The president was in Florida today to spotlight five volunteer groups--among them the Volusia County Amateur Radio

Emergency Service (ARES)--for their value to the new Office of Homeland Security.

"The president joined us this morning on the ARES net on 3950," said ARRL Northern Florida Section Manager Rudy Hubbard, WA4PUP, who was on hand for the momentous occasion. Hubbard said the president's remarks originated at a station set up in Orlando by John Schmidt, AF4PU, in the hope that Bush would be able to take a few minutes to address the 75-meter net. The ARES net meets daily at 9 AM Eastern Time.

"The president spoke for about two minutes," Hubbard said. "The theme was people volunteering their services for the benefit of the country." He said Bush expressed his appreciation for those who were volunteering their time in public service--remarks, he said, that were similar to some Bush made during his State of the Union address earlier this week.

Hubbard said a copy of revised Amateur Radio antenna (PRB-1) legislation was given to the President and to the president's brother, Florida Gov Jeb Bush, for possible introduction in next year's Florida legislative session. "We Amateur Radio operators will volunteer however we're needed, and maybe it will be seen that we can greatly help the nation if we have the antennas we need," Hubbard commented.

The event marked a rare appearance on ham radio by a sitting president. Former President Gerald Ford spoke via a ham radio satellite hookup in 1986. The president also spotlighted Citizens on Patrol, a retiree group that patrols communities for the sheriff's office; Citizen Emergency Response Team, which helps coordinate neighborhood disaster response; the Council on Aging; and the Volusia County Fire-Police Volunteers. Bush's stop in Florida was part of a swing through the southeastern US, which included earlier stops in North Carolina and Georgia.

## **The Electronic Swiss Army Knife** *de W3SRL Steve Lane*

*[This article is reprinted with permission of the Wireless Association of South Hills, PA, and is a continuation of an article on the December 2001 Ø-Beat.]*

Last month's article described using the MFJ-259 antenna analyzer for tuning an antenna for maximum efficiency, and also determining the 2:1 bandwidth (also referred to as the useable bandwidth) of a typical mobile

antenna. While this is probably the most common use for an antenna analyzer, it mere scratches the surface of what this little unit can add to your ham toolbox.

This month we're going to explore several of the measurements that the MFJ-259 can make pertaining to 50-ohm coaxial cable; Coax loss stated in terms of dB, distance to fault, and percentage of transmitted power.

To measure the actual (as opposed to "advertised") loss in a particular section of 50-ohm coaxial cable, simply connect the cable to the SO-239 connector on the analyzer unit. Make sure that the other end of the cable is **not** connected to any type of equipment. Turn the analyzer on, and after the self-test has completed, press the mode switch once. The display should momentarily read "Coax Loss" and then display the operating frequency. Select the frequency range on the front panel selector where you will be using this cable, and then use the tuning frequency knob to zero in on the exact operating frequency that you wish to analyze. This frequency will be displayed on the top line of the LCD display, and directly below this will be the Coax Loss in dB for that operating frequency. Don't be terribly surprised to find that there is a difference between the loss figure that the manufacturer gives, and the actual reading that you observe, as quite a number of factors can affect the actual performance of a particular piece of coax cable. If the difference is significant however, say more than about 10-15 percent or so, a call to the cable manufacturer may be in order.

For our second example, we're going to analyze a piece of coax to find the approximate distance to a fault. Let's say for the sake of this article, that you took down a run of expensive 9913 coax last fall that seemed to have a dead short in it. While cleaning out the garage you decided to try and find out where the short was and maybe even fix it before you decide to toss it in the trash.

Connect the cable to the analyzer as we did in the last example, and turn the analyzer on. Press the "mode" and "gate" buttons simultaneously, and the word "Advanced" will appear briefly in the LCD display. Press the "mode" button twice until the "Distance to fault in feet" message briefly appears in the display. Select a frequency where the impedance reads as close to zero as possible, and the reactance reads zero. Press the "gate" button and the blinking "1<sup>st</sup>" display will become "2<sup>nd</sup>", and once again dip the impedance meter and adjust for the lowest possible reactance is found. Press the "gate" button again, and the display will indicate the distance to the fault in feet. Let's say the reading given here is 38 feet. **Remember:** The meter is "dumb" and has no idea what kind of cable is attached to it. This reading is the **Electrical** length to the fault, not the **Physical** length. To find the **Physical** length to the fault we need to know the cables rated velocity factor, found in the manufacturer's specifications. In the case of

Belden 9913, the factor is 84%. So multiply 38 feet times .84 to get 31.92, or roughly 32 feet to the fault. Sure enough, right around 32 feet from the meter we find a pinch in the line partially sliced through the outer jacket, the braid and the inner insulation of the cable and a couple wild strands of the braid were pressed down into the inner core. Hmm. Maybe the neighbor kid got a little wild with the mower one day!

For our last example this month, we're going to figure out the actual percent of transmitted power that is reaching the far end of the coax. Once again, connect the rig's end of the coax to the meter, but this time connect the far end to your antenna system, and power up the antenna analyzer. Press the "mode" and "gate" buttons simultaneously to get into the advanced menu, and then press the "mode" button four times. The display should flash "% Transmitted Power" briefly.

Select the operating range and then dial in the desired frequency. The display will then display SWR in terms of the percentage of power that actually reaches the antenna. **Important!** Keep in mind, that this is the electrical figure that the transmitter "sees" at that frequency. This does not indicate what is actually radiated from the antenna system! In other words, if you have a tuner in the line between your rig and antenna, the rig may be happily pushing its full rated 100 watts up the coax, because the tuner "fools" the rig into seeing a perfect 1.1:1 SWR. Just because your tuner will "load up" your 10-meter dipole on 160 meters doesn't mean it is actually going to radiate anything there! The tuner's job is to keep the high-SWR fold back circuitry in your rig from coming into play, and cutting the rig's output down to zilch. In this case, feeding a horrible antenna system with 100 watts may radiate a watt or two, but if the rig only radiates a watt or two to begin with, only a small fraction of that flea power will be radiated. Think about it!

The important thing to remember here is that the antenna analyzer only "sees" what your rig is seeing on the end of the coax when used in this mode. It is simply another way of expressing SWR. To know where your antenna system actually performs at its best, you must take the time to use the antenna analyzer in its primary mode, find the resonant frequency for each of the bands the antenna is designed to operate in, and adjust as needed for maximum efficiency. (Remember the 2:1 bandwidth I mentioned last month?)

Well folks, that's it for this month. Next month we'll get into a handful of other simple uses for the MFJ Antenna Analyzer in my final installment of this series.



## Club Business

### **Board Meeting Minutes** *de NØMIK Mike Allen, Secretary*



The January 14, 2002 PPRAA Board of Directors (BOD) meeting was called to order at 7:00 PM by President Rick Brown KØSU at the home of Rob N7LV. Present were Mike WV7T, Rhoda KB2BZY, Tom NØNTX, Rob N7LV, Mike NØMIK, Sid K4ARM, Kate KCØEGJ, Aaron KD6FLM, Bob KBØB, and Jerry ADØA. Two errors were noted in the last minutes of the BOD meeting. First; the minutes should have read that Seth KIØPE had offered to buy a donated RV generator for \$100 vs the \$160 reported, and second; the statement that the Amateur Radio News Service will print the Ø-Beat is not true. **The February BOD meeting will be held at the home of Sid K4ARM.** The first topic was settlement of residual Christmas party issues. Sid will present his receipts for the hams he bought to Ron NKØP for reimbursement. Programs for the next few months will be Mark Baker, ARRL State Liaison in February, Shel KFØUR presenting PSK-31 or Tom Magnuson talking about Skywarn in March. Bob KIØGF has volunteered to do a program on "boat anchors" and will probably be scheduled in April or May. Swapfest will be held at Lewis Palmer HS, and the two main prizes will be an FT-100D mobile rig and a VX-1R HT. Field Day will be held in the mountains, per the club vote at the last meeting. Mike KØTER will schedule the site in March. There was discussion on whether we should use the MARC call sign (NXØG) or the PPRAA call sign (WBØVTU). No decision or expressed desired was reached, however. Meeting locations for February and March meetings was the next topic. A desire for handicap accessible was noted. Possible venues were; the Pikes Peak Library, the Leon Young Service Center, the Fire Training Center and the Auditorium at the Colorado Training Center. An announcement will be posted on the club web site when the final location is determined. Convention Planning for the Rocky Mountain Division Convention was discussed next. Rick KØSU attended the kick-off meeting on January 12<sup>th</sup>, but did not commit the club's participation at that meeting. Rick will find exhibitors though, and will need assistance with this activity. If the PPRAA is to support the convention, we will need about 4 representatives to the planning meetings, which are held the second Saturday of every month in Castle Rock. The meeting location is to be determined. The CCARC may provide \$1500 seed money and serve as Webmaster for the convention. They may also serve as an overall umbrella organization for the convention, but there is a lot of discussion among committee members whether they want to fall under the CCARC umbrella or work independently. Bob KBØB has volunteered to take over ordering club jackets for members who want them. Sid still has the 2 meter rig that will go to

Panorama Middle School, and the club still needs to dispose of the tower donated as part of the estate of Faye Herron KBØQI (SK). Rob N7LV noted that Frank KFØWF's classes have started and suggested club members go down and support Frank and the students. The BOD voted to continue offering free 6 month memberships to all of Frank's graduates. Tom NØNTX said the club should put stickers of some sort on gear donated from estates and that gear loaned to the Red Cross. Small brass plates will indicate the equipment came from the estate of the donor or, in the case of the Red Cross station, is the property of the PPRAA. Mike WV7T would still like to be on distribution for the BOD e-mail. The board approved Mike's request. He noted that the building at St Paul's church will be complete in April and will have space for classes. Mike is also putting together a comprehensive amateur radio program to be presented to scouts. The program will be ready by the end of April, and Mike needs assistance with digital and video cameras to record the program, satellite operators, as well as representatives from ARES, RACES, and NTS. He presented a chart showing his proposed presentation set-up. Discussion on how to structure the presentation for scouts followed. The Board agreed that the PPRAA would want to sponsor such a program and unanimously voted to allocate \$100 to Mike for ink cartridges so he can print the required transparencies. The meeting adjourned at 8:33 PM. *de Mike Allen NØMIK, Secretary*

### **General Meeting Minutes** *de NØMIK Mike Allen, Secretary*

The meeting was called to order by President Rick Brown KØSU at 7PM. Forty-nine members and guests were in attendance. After introductions, a motion to accept the minutes of the last meeting passed unanimously. Committee reports began with Mike KØTER announcing he'd found the one lost item of club property while he was searching his garage for something else. The Membership Chairman, Les KCØNC reminded all members that it is time to "re-up" and send in dues for another year's membership. It was a quiet month with no interference problems to report. Rick, in his other duty as Programs Chairman, ran over the coming programs for the next few months. Mark Baker, the ARRL Liaison to the state government will be speaking to us in February, Shel KFØUR will present a PSK-31 program in March, and Tom Magnuson KBØZWX of the National Weather Service and Bob KIØGF will each do programs in the next few months. Public Service Chair Mike KØTER reported no activity this early in the year. Bob KIØGF reported on the hamfest which will be held on June 1<sup>st</sup> at Lewis-Palmer High School. The two main prizes will be a Yaesu FT-100D mobile all band, all mode rig and a Yaesu VX-1 HT. Planning meetings are held on the last Saturday of the month at the



CSPD Falcon substation on Goddard St. Rick KØSU, speaking for the Education Chair, noted that Frank KFØWF had started his Technician classes and has about 23 students. Ø-Beat Editor Rob N7LV asked for help with articles and announced that the Ø-Beat is now available on the club web site. Our AMSAT Chairman, Tom NØNTX, relayed that while AO-40 was experiencing some bad sun angles, but doing "OK", AO-10 was doing "Great". Wes KØHBZ, ARES EC, announced that he had magnetic "Emergency Communications" signs for sale at \$30/pair, and that those ARES members who did not have ARES ID cards would have a chance to have one made at the next MARC meeting in Woodland Park. Finally, Ron NKØP gave the Treasurer's report, noting \$634 income, \$256 in expenses, leaving a balance of \$3888.46 in the general fund. Announcements began with Mike WV7T informing us that he was putting together a program to present to Scouts covering every aspect of ham radio. Mike is looking for help with presentations, Elmering, etc. Moe WBØRTF announced the lunch bunch meeting on Friday at the Hometown Buffet, and the Colorado YL net, which meets at 0900 local every Saturday on the CRA linked system (145.160 MHz neg offset in Colo Spgs). Dan KBØPPM had certificates for those who helped with JOTA. Rick KØSU announced that reflector subscribers now have new capabilities in how they use the reflector, but stipulated NO HTML messages, and NO attachments, please. Rick also said he would be representing PPRAA at the kick-off meeting in Denver for the ARRL Division Convention to be held in 2003. Jeff NØWPA announced an Edge of Space Sciences (EOSS) balloon launch from Meadow Lake airport on Feb 23. He also noted that ARRL is considering dropping the Section News column from QST, and asked the members present for their opinion. Most favored keeping it in the magazine vs getting the column from the ARRL web site. There was no old business. The first order of new business was the election of a new Vice President to fill the remainder of Mike WV7T's term. Kate KCØEGJ had volunteered to run. No other nominees were presented, and Kate was elected by acclamation. The next order of business was the location of this year's Field Day, presented by Mike KØTER. Mike had previously presented a survey on the reflector on whether the members would like to see Field Day held in or near Colo Spgs, or held in the mountains again. The reflector survey was evenly split, 15 to 15. A vote of club members present indicated an overwhelming majority wanted to hold Field Day in the mountains. A contingency site will be available at the adjoining property of Sid K4ARM and Seth KIØPE. Field Day this year will be held on June 22/23, the last full weekend in June. Jerry ADØA announced that the World Radiocommunication Conference 2003 was looking for donations to help with defense of amateur frequencies. A motion was made by Mike KØTER and seconded by Doug WØMHP to donate \$100 to the WRC organization. The motion passed unanimously. The last order of business was discussion led by Rick KØSU on meeting sites for the

February and March club meetings. Since we are unable to hold our meetings at our normal site, the meetings will be held at the Springs City Church on the Tuesday *before* the second Wednesday of the month. (Note: This was later changed to the Leon Young Service Center, 1521 Hancock Expressway) After the break and door prize drawings, the Hammy was presented to Mike WV7T by Tom NØNTX. The next Board meeting (Jan 14) location will be held at Rob N7LV's house. The program was Homebrew night, and several interesting projects were presented by their creators. The meeting adjourned at 8:53 PM. *de Mike Allen NØMIK, Secretary*

## Membership Report *de KCØNC Les Borst*

### Please welcome these New Members

LARRY FARMER.....	WA6GZC
PATRICK KELLY.....	
MICHAEL PROCTOR.....	KBØIAP
FRANK SHELTON.....	NØFS

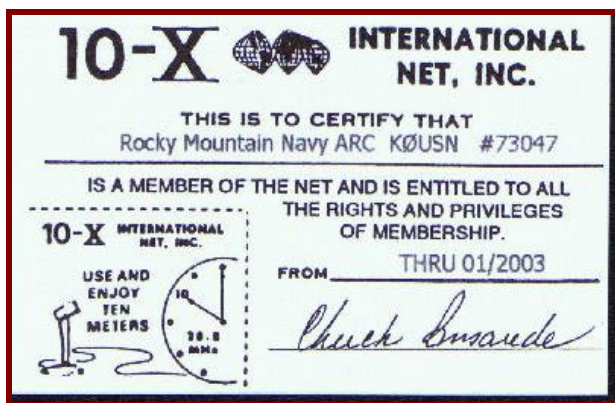
### Members who need to see the treasurer

ROBERT BECKER.....	KCØFIH
MARCIA BECKER.....	KCØFII
WILLIAM BELLAMY.....	WB2EVR
ELEANOR BELLAMY.....	KB2BAJ
TOM BENTON.....	KN6PJ
RONALD BERKLEY.....	ABØNS
DAVID BINA.....	N7IAN
RENAY BOYES.....	KAØROY
JEFF BOYES.....	NØJLH
PAUL BRACH.....	N5KN
TOM BRERETON.....	W2TJO
BRIAN BROWN.....	KBØMFA
CARLOS CARO.....	KBØREI
AUSTIN CLEIS Jr.....	W6RML
RICHARD CULLEN.....	WØMNX
MIKE DASSERO.....	NØMUD
SUZANNE DICKERSON.....	WXØWX
DOROTHY DUBON.....	KBØSHJ
DONALD DULEY.....	KCØGBG
ROGER ESLICK.....	NØVR
ANDREW FERRARA.....	WAØIBS
ELIZABETH FERRARA.....	KCØDMQ
CAROL FERRARA.....	KCØCYU
JACLYN FOUST.....	KCØJTP
ROGER FOUST.....	KE6ZOT
ROGER FRENCH.....	KBØRLF
PHILIP GAGE.....	KIØNY
ROY A HALL.....	KCØKLJ
TROY L HANSON.....	WBØLMH
LEONARD HODGES.....	KCØCYV
DAN HOLMES.....	NH6EU
DALEAN JANES.....	KAØTSA
CAROL KELLEY.....	
CHUCK KELLEY.....	NØXWW
RICK KILE.....	WB7THT
KEN KNIGHT.....	NØYGM
CURTIS KNOTT.....	KB2ZVX
KIM KNOTT.....	KCØDGK
BILL LARSON.....	KGØXW
ANITA LONG.....	
HARLAN E LONG.....	WØHEL
DAVID MARSHALL.....	ABØJY
FREDERICK MAXWELL II.....	KCØFRM
SID MESSING.....	N9CNA
NORMAN MILLER.....	NØENN
ERIK MUGELE.....	KGØXE

TERRY MURROW .....	KC0KSA
DOUGLAS J MYERS .....	KL1DJ
CHRISTOPHER MYERS .....	KL1DY
RAMONA PARIS .....	N0OPH
DOUG PARIS .....	N4TGO
PHIL PEARSALL .....	KC5LXC
GENE PFEFFER .....	K0JHH
KENNETH PHILLIPS .....	N0NKP
BILL PIERCE .....	KD0JU
MOE PIERCE .....	WB0RTF
EMIL H ROCK .....	KC0DMU
IVAN RYMES .....	K0VPV
VERNON SALLIE .....	KI0RA
RICHARD SCHARER .....	N0UVT
CHARLOTTE SCHARER .....	N0VAN
EMANUEL SMITH .....	KC0GUH
ALFRED SONTAG .....	KA0WIE
KIM KYEONG SOOK .....	KC0IST
ROGER SPAULDING .....	KB0PQM
JONATHAN SPIEKER .....	KC0HPX
BILL STANFILL .....	K4YCD
ROGER G STUBBE .....	W0ZMU
KEN THILL .....	K0WHO
RAYMOND VIGEANT .....	KC0HQD
CATHY WILKERSON .....	KC0JTH
REBECCA WILKERSON .....	
JOSEPH WILKERSON .....	
G. JEREMIAH WILLIAMSON .....	WB9EIU
DOUGLAS WOLFF .....	KE6TWH
LANDON L YOUNG .....	N5NHK

Total Number of Members  
**210**

[Ed: There are a bunch of folks that haven't renewed. All memberships now expire on Dec 31, and all renewals are good for the entire year. We hope your payment has just crossed in the mail. We have a great year ahead of us, and we need your support. If you haven't already, please take this opportunity to renew your club membership.]



Collecting 10-X wallpaper? The Rocky Mountain Navy ARC has its 10-X number now: 73047. Listen and try to work them!

### ARRL Stands Up To More Band Threats

de N7LV Rob Roller

According to a recent ARRL bulletin, the 70cm band is facing the threat of unlicensed, low power, transient RF identification devices operating between 425 and 435 MHz. Right now, Part 15 permits low power transmitters, but the transmitters that have been tentatively approved by the

FCC will radiate much higher power, posing a major interference threat. The ARRL is requesting that the transmitters be moved to another band, such as one designated for industrial applications.

On a related topic, the ARRL has also taken a stand on the refarming of the novice HF frequencies. The proposal would allow novice licensees to transmit CW up to 200 W in what's now the general portion of the 80/40/15/10m bands. This would also allow for increasing the HF phone band on 80/40/15.

Finally, in an effort to cut costs, the ARRL is considering removing the Section News from the back of QST and making it available only on the web. Jeff Ryan N0WPA recently polled the PPRAA membership, and a majority would like to see it remain in QST. He'll take that info back to the ARRL at a future meeting. The ARRL is already removing the ARRL minutes from QST as they are available on the web. As for the Section News, for those of you that are Members Only on the web, you'll find that a "Section News" may be added to your web page when you log in.



### QTH/QSL Web Hosting In Trouble

de N7LV Rob Roller

Al Waller, owner/operator of the QTH/QSL web system which hosts our e-mail reflector, our web page, and several other pages and reflectors serving this region, has lost one of his most generous donors. As a result, he financial situation is such that he could be out of business by this fall if donations from users don't increase. If every user donates as little as \$1 he could stay in business for 20 years. Every little bit helps. We'd like to encourage our members to donate a small amount to Al to keep him afloat. If you are a user of his services (i.e., you receive PPRAA e-mail, you have your own web page, etc), a small donation will help Al. Even a small amount of \$1 or \$5 will be helpful, especially if he gets many of those small donations. You can donate via mail to QSL.NET, Inc.; 34087 Old Hickory Road, Laurel, DE 19956, or electronically by visiting <https://proxy.qsl.net/donation/>

### Past PPRAA Member Hospitalized

de N7LV Rob Roller

A terrible accident recently put Liz Deutsch N0TUK into the hospital. Liz was struck by a truck while crossing a street near her home as she walked to work. She's recovering okay, but will need time to fully recover, and is expected to go home around Feb 4. Flowers and cards can be sent to the QTH of Ron and Liz. If you can offer them some help after she returns home, I'm sure it would be greatly appreciated. Liz has served on the PPRAA board in past years and as secretary. Liz is married to our current treasurer, Ron NK0P.

# Pikes Peak Region Ham Radio Event Calendar

February / March 2002 -- Please see Page 2 for Points of Contact						
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
					1	2
3	4	5 PPRAA Class	6	7 PPRAA Class/VE Session	8	9 PPRAA VE Test
10 PPARES Staff Mtg	11	12	13 PPRAA Mtg	14	15 Lunch Bunch	16 CQC Banquet
17 ARA Hamfest	18 Board Mtg	19	20 MARC Mtg	21 RACES Mtg	22	23 Swapfest Mtg EOSS Balloon Launch
24	25 ZB Deadline	26	27	28	1	2 MARC VE Test
3	4	5	6	7	8	9
10 PPFMA Mtg	11	12	13 PPRAA Mtg	14	15 Lunch Bunch	16
17	18 Board Mtg	19	20 MARC Mtg	21 RACES Mtg	22	23
24	25 ZB Deadline	26	27	28	29	30 Swapfest Mtg
31						

**Questions about any event on this calendar? Something missing? Contact a Board Member!**

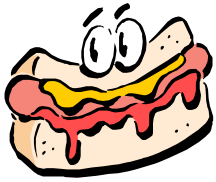
Membership Application for the Pikes Peak Radio Amateur Association, Inc.	
P.O. Box 16521, Colorado Springs, CO 80935-6521	
Date: _____	<input type="checkbox"/> New Member <input type="checkbox"/> Renewal
Name: _____	In which activities would you like to participate?
Address: _____	Field Day <input type="checkbox"/>
City: _____ State: _____ Zip: _____	Demonstrations <input type="checkbox"/>
Call: _____ Class: N T + G A E    Phone: _____	Nets or round tables <input type="checkbox"/>
Mbr of ARRL? <input type="checkbox"/> Yes <input type="checkbox"/> No    E-mail: _____	Organize activities <input type="checkbox"/>
Additional Family Members to Join/Renew:	Teach ham classes <input type="checkbox"/>
Name: _____ Call: _____ Class: _____ ARRL? _____	Full Member \$15: <input type="checkbox"/>
Name: _____ Call: _____ Class: _____ ARRL? _____	Family Membership \$18: <input type="checkbox"/>
Name: _____ Call: _____ Class: _____ ARRL? _____	Over 65 \$10: <input type="checkbox"/>
	Over 65 Family \$12: <input type="checkbox"/>
	Associate \$12: <input type="checkbox"/>
	Ø-Beat Only \$12: <input type="checkbox"/>
	Donation to Club: \$ _____
	Total Enclosed: _____
	<b>MAKE ALL CHECKS PAYABLE TO "PPRAA"</b>
<b>Please indicate how you'd like your Ø-Beat delivered:</b> <input type="checkbox"/> Standard hardcopy via U.S. Mail (Defaults to standard hard copy in the event that NO check boxes are checked) <input type="checkbox"/> As a PDF file attachment via e-mail, to help save a few bucks <input type="checkbox"/> I'll save the club a few bucks and download it from the Web!	
Circle your interests ⇒ HF / V/UHF / FM / SSB / Digital / DX / Contests / Technical / Hardware / Other _____	
New and renewing members must submit a completed application form along with your check to the Treasurer.	
<b>Please Type or Print Clearly!</b>	

**ALL NEW MEMBERSHIPS AND RENEWALS WILL BE PRORATED TO EXPIRE IN DECEMBER!!**



## RadioActivities!

### Lunch Bunch



The next **Lunch Bunch** is Feb 15 at Country Buffet in the Citadel Crossing Shopping Center, Academy & Galley, 1130-1300. (Always the **Friday** following the club meeting.) Moe WBØRTF is now coordinating the

Lunch Bunch !! Note: **This is a different location than in recent months!**

### Hamfest Horizon

- **Feb 17:** Aurora Repeater Association Hamfest, Adams County Fairgrounds, Brighton. 0900 to 1300. \$4 admission. Talkin on 147.15+. Wayne Heinen, NØPOH, 303-699-6335, n0poh@arri.net. [www.qsl.net/n0ara](http://www.qsl.net/n0ara)
- **Apr 6:** Longmont ARC LARCFest, Boulder County Fairgrounds, Longmont. [www.qsl.net/larc](http://www.qsl.net/larc)
- **May 17-19:** Dayton Hamvention, Dayton, OH. 937-276-6930. P.O. Box 964, Dayton OH 45401-0964. [www.hamvention.org](http://www.hamvention.org)

- **Jun 1:** PPRAA Megafest 2002! Lewis-Palmer High School. Raffle prize: FT-100D, Yaesu VX-1R. Bob Ryals KIØGF, [ryals@pcisys.net](mailto:ryals@pcisys.net), 265-9950. [www.qsl.net/ppraa](http://www.qsl.net/ppraa)

### Dits & Bits

- **For Sale:** By Dave Ek NKØE: Sierra Wilderness QRP rig, Excellent cond. \$275 [ekdave@earthlink.net](mailto:ekdave@earthlink.net)
- **Colorado QRP Club** is holding its 8<sup>th</sup> annual banquet in Denver on Saturday, Feb 16. Program is on Radio Havana Cuba by CO2KK. Contact Rich WØHEP at [COCdinner@aol.com](mailto:COCdinner@aol.com) or visit <http://www.cqc.org>

**Jess Miley**                      **KØTAA**  
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**Pikes Peak Radio Amateur Association, Inc.**  
**P.O. Box 16521**  
**Colorado Springs, CO 80935-6521 USA**

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**To:**